42

CLAIMS

1. A wiring forming method of supplying a first liquid forming a first pattern, and a second liquid forming a second pattern, which is different from the first liquid, in such a manner that the liquids contact each other on a substrate to thereby form a wiring pattern by the first and second patterns on the substrate, the method comprising:

5

a first pattern forming step of supplying the .

10 first liquid to the substrate to thereby form the first pattern on the substrate; and

a second pattern forming step of supplying the second liquid to the substrate to thereby form the second pattern on the substrate,

wherein after performing one of the first pattern forming step and the second pattern forming step, the other forming step is performed.

- The wiring forming method according to claim
 1, wherein after performing the first pattern forming
 step, the second pattern forming step is performed.
- The wiring forming method according to claim
 wherein the first pattern forming step comprises
 the steps of: curing the first liquid supplied on the substrate.

43

4. The wiring forming method according to claim 3, wherein the curing step comprises the steps of: heating and accordingly curing the first liquid supplied to the substrate.

5

5. The wiring forming method according to claim 1, wherein the first pattern forming step comprises the steps of: forming the first patterns on a plurality of positions of the substrate, and thereafter the second pattern forming step comprises the steps of: forming the second pattern between the first patterns formed in the plurality of positions on the substrate in such a manner as to bring the second pattern into contact with the first pattern.

15

10

6. The wiring forming method according to claim 1, further comprising the steps of: discharging the first and second liquids by an ink jet system to thereby supply the liquids onto the substrate.

20

7. The wiring forming method according to claim 1, wherein after performing the second pattern forming step, the first pattern forming step is performed.

25

8. The wiring forming method according to claim 1, wherein the first pattern is an insulated pattern

44

having an insulating property, and the second pattern is a conductive pattern having conductivity.

- The wiring forming method according to claim
 1, wherein the first and second patterns are insulating insulated patterns having different properties.
- 10. The wiring forming method according to

 10 claim 1, wherein the first pattern is an insulated

 pattern having an insulating property, and the second

 pattern is a semiconductor pattern of a semiconductor.
- 11. A wiring board comprising: a wiring formed
 15 by the wiring forming method according to claim 1;
 and the substrate.
- 12. A wiring forming apparatus for supplying a first liquid forming a first pattern, and a second liquid forming a second pattern in such a manner that the liquids contact each other on a substrate to thereby form a wiring pattern by the first and second patterns on the substrate, the apparatus comprising:
- a first liquid container which stores the first liquid;
 - a second liquid container which stores the second liquid;

45

first pattern forming means for supplying the first liquid to the substrate from the first liquid container to thereby form the first pattern on the substrate;

second pattern forming means for supplying the second liquid to the substrate from the second liquid container to thereby form the second pattern on the substrate; and

control means for executing a control in such a

10 manner that after forming the pattern using one of
the first pattern forming means and the second
pattern forming means, the pattern is formed using
the other means.

13. The wiring forming apparatus according to claim 12, wherein after forming the first pattern on the substrate using the first pattern forming means, the second pattern is formed on the substrate using the second pattern forming means.

20

25

5

- 14. The wiring forming apparatus according to claim 12, wherein after forming the second pattern on the substrate using the second pattern forming means, the first pattern is formed on the substrate using the first pattern forming means.
 - 15. The wiring forming apparatus according to

*

WO 2005/062685

claim 12, wherein the first and second pattern forming means supply the liquids to the substrate by an ink jet system.

46

PCT/JP2004/019486

- 16. The wiring forming apparatus according to claim 12, wherein a size of the corresponding first pattern is changeable in accordance with that of the second pattern to be formed.
- 17. The wiring forming apparatus according to claim 12, wherein the first pattern is an insulated pattern having an insulating property, and the second pattern is a conductive pattern having conductivity.
- 18. The wiring forming apparatus according to claim 12, wherein the first and second patterns are insulating insulated patterns having different properties.
- 20 19. The wiring forming apparatus according to claim 12, wherein the first pattern is an insulated pattern having an insulating property, and the second pattern is a semiconductor pattern of a semiconductor.